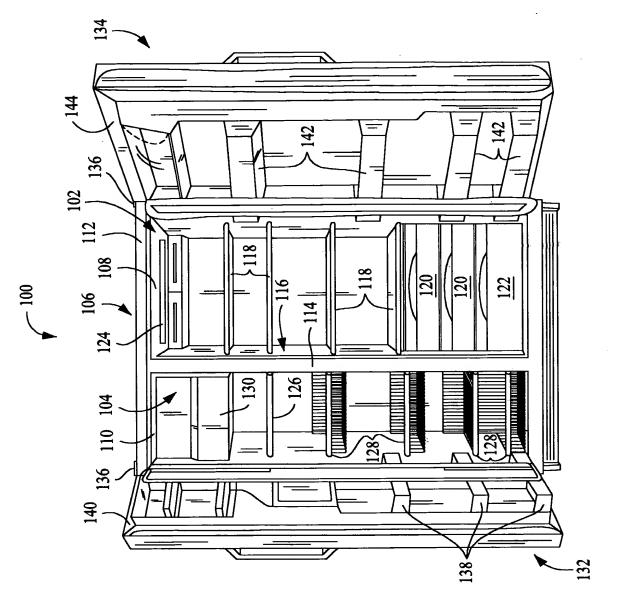
Applicant: Holmes et al.
Serial No.: 09/742,545
Atty. Dkt. No.: 9D-HR-19396
Title: REFRIGERATOR – ELECTRONICS ARCHITECTURE
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APPROVADINED O.G. FIG. CLASS SUBCLASS BRAFFERENAN

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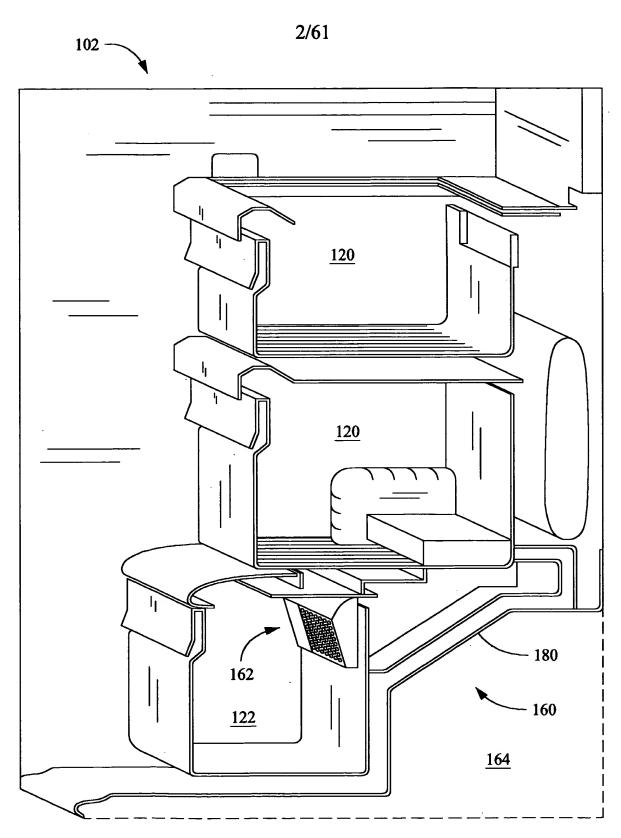
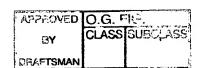


FIG. 2



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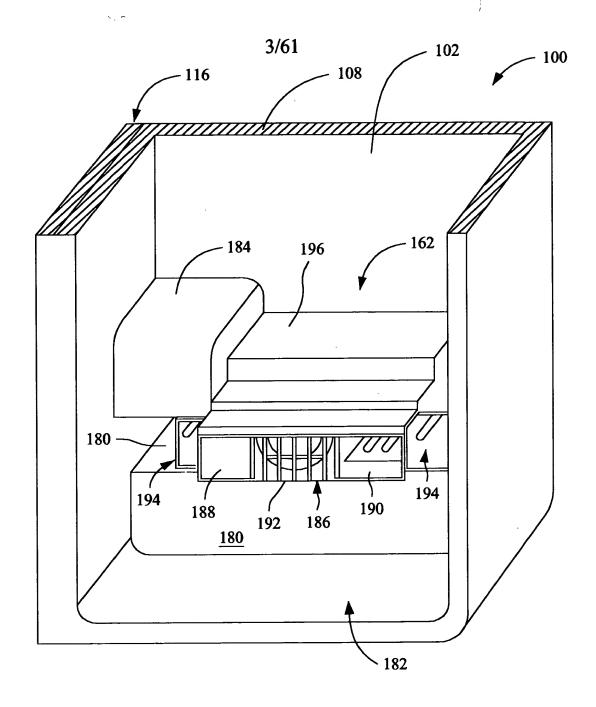
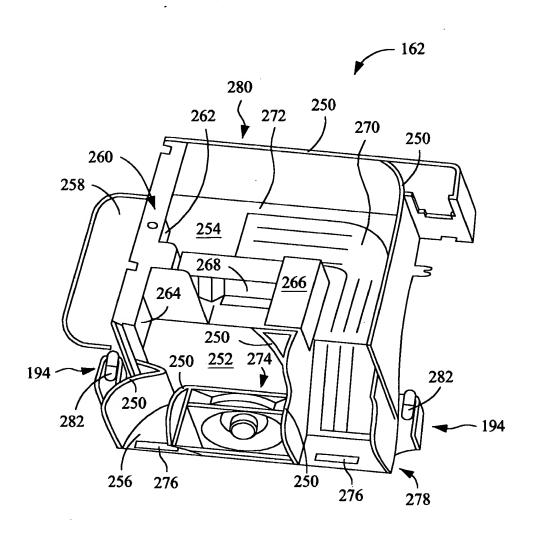


FIG. 3

APPROVED O.G. FIG.			
BY	CLASS	SUBCLASS	
DRAFTSMAN			

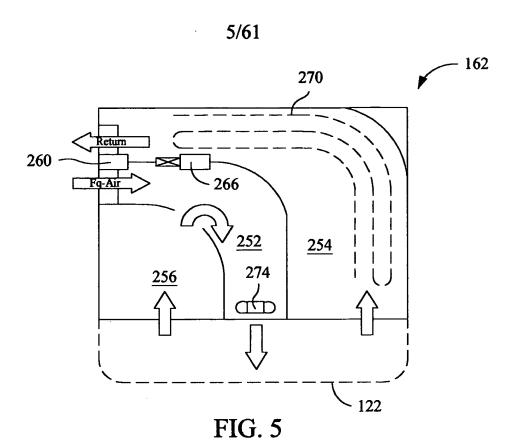
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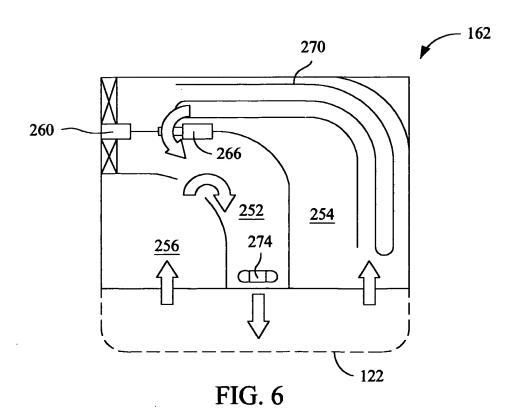
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O.G. FIG A PROVED CLASS GUJO ßY PRAFTSMAN

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APPROVED O.G. FIG CLASS SUBCLASS GRAFTSMAN

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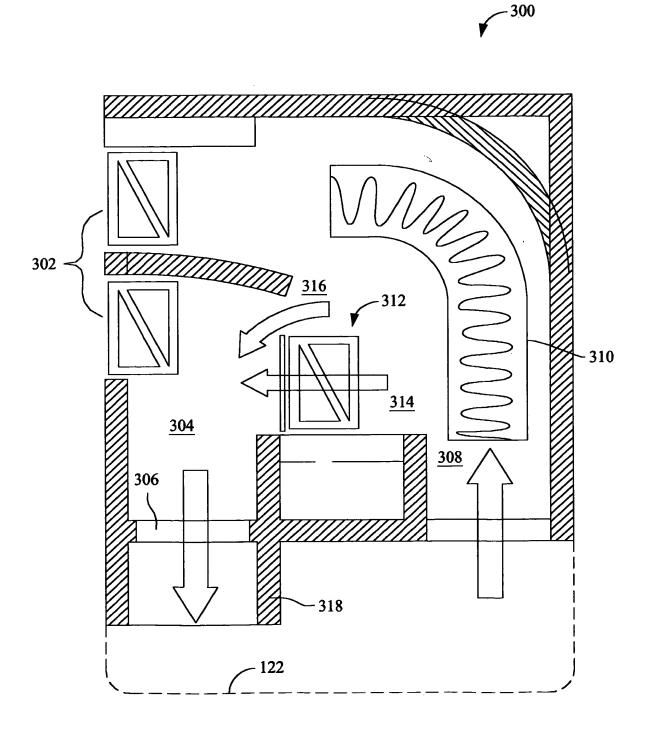


FIG. 7

BY CLASS SUBCLASS

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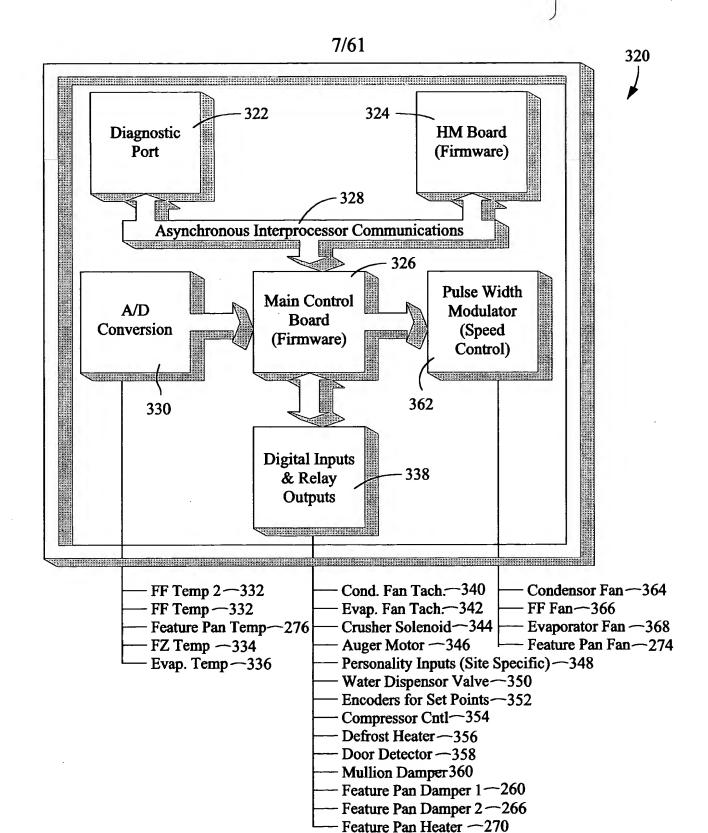


FIG. 8

DEAFTSMAN

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8/61 396 DISPENSER BOARD Quantum BPO MAIN BOARD Mounts all components • Provides interconnections Provides external connections · Provides electrical isolation · Provides ground plane/shielding · Provides attachment to structure 376 370 **ENCODER BOARD EEPROM** Leap BPO Stores critical data SIGNAL CONDITIONING Digital • Conditions encoder signals 380 382 DOOR SWITCH INPUT Digital FF and FZ Door Switches Senses door switch state 384 Analog FF THERMISTORS (2) Mux Control Senses FF air temperature 386 394 **FZ THERMISTOR** SENSOR SIGNAL CONDITIONING Senses FZ air temperature TO Routes thermistor MUX signals 388 FIG 9B Calibrates thermistors **EVAPORATOR THERMISTOR** Conditions thermistor signals Senses evap. temperature 390 AMBIENT THERMISTOR FEATURE PAN THERMISTOR Senses ambient air temperature Senses feature pan air temp. 392 LINE CONDITIONING Line Voltage Filters line 90-265Volts AC, 50/60Hz Protects from surges 374

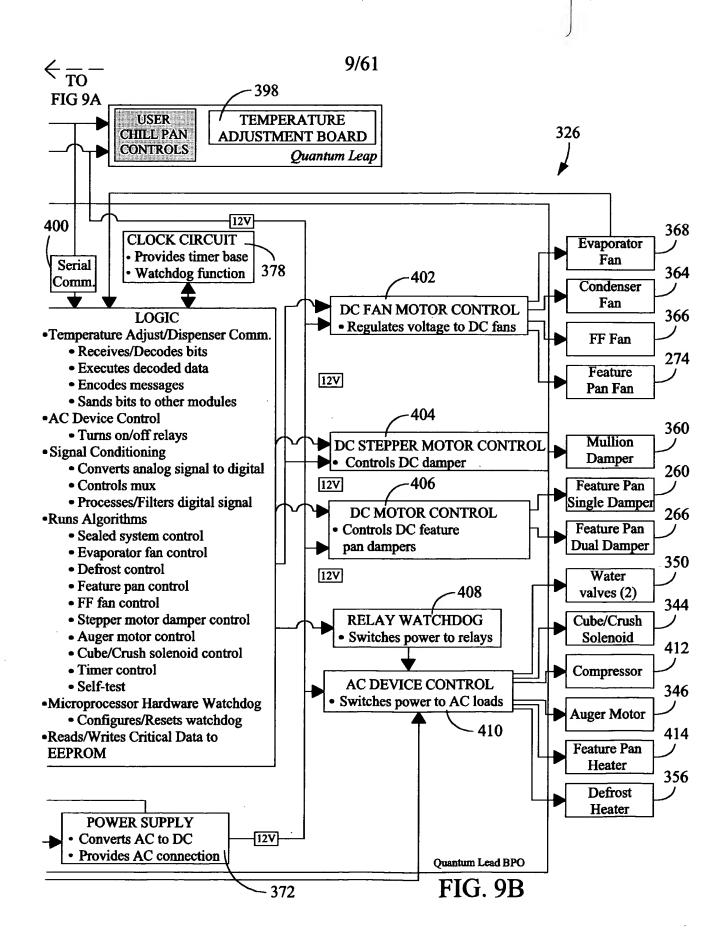
FIG. 9A

APPROVED O.G. FIG.
BY CLASS SUBCLASS

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APPROVED O.G. FIG.
BY CLASS GUBOLASS

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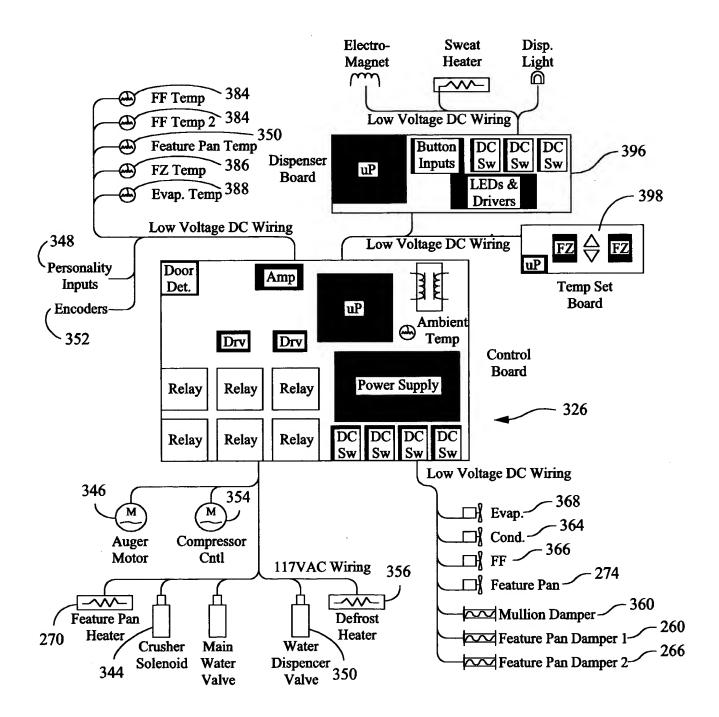
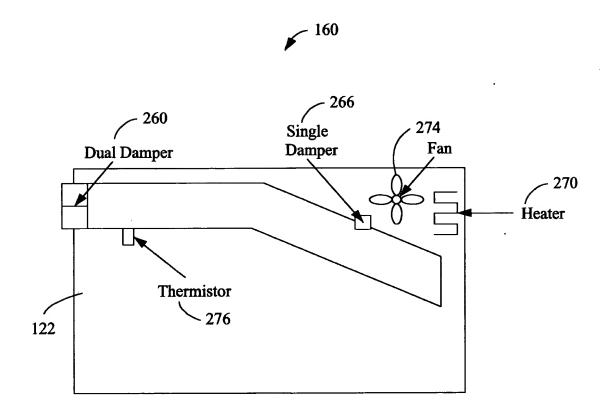


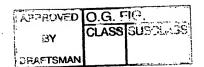
FIG. 10

- POVED	O.G. FIG.		
BY	CLASS	SUBOLASS	
DRAFTSMAN	,	1	

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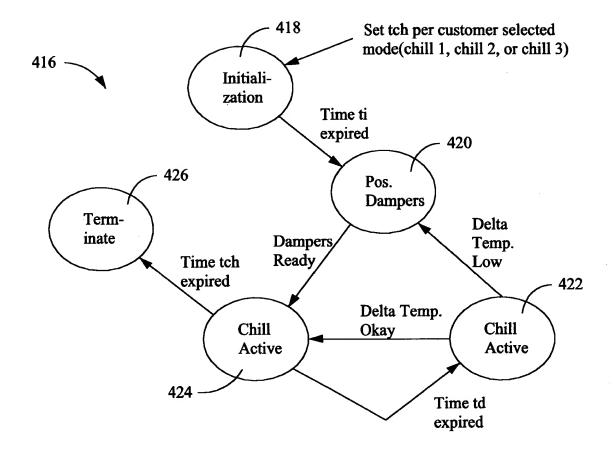
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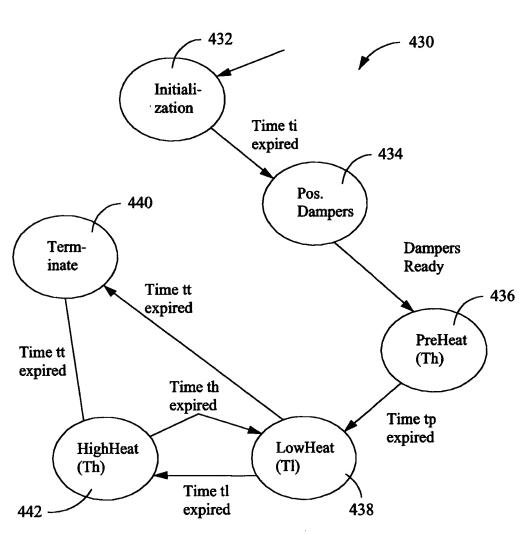
APPROVED O.G. FIG. CLASS SUBCLASS CRAFTSMAN

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13/61



Initialization: Shuts off heater and turns on fan. This mode is implemented so that the customer interface LED that is wired in parallel with the fan will turn on as soon as the button is hit. Time ti is the initialization time and will typically be approximately one minute.

Pos. Dampers: This state shuts off the fan, sets the single damper open then closes the dual damper. It then turns the fan back on. This is done for power management

PreHeat: This state regulates the pan temperature

LowHeat

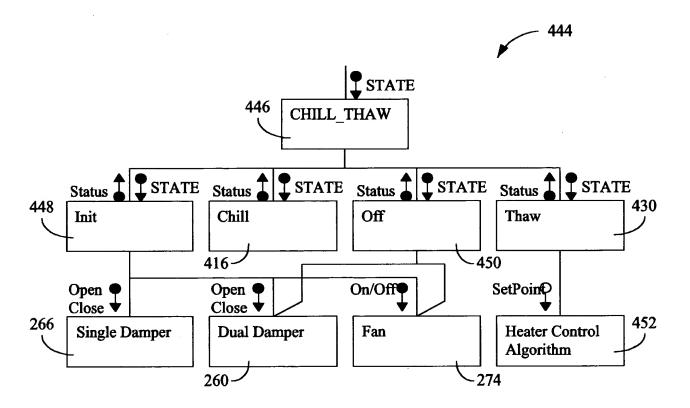
HighHeat:

Terminate: This mode closes both dampers and shuts off the fan then returns to idle.

APPHOVED O.G. FIG.
BY CLASS SUBCLASS

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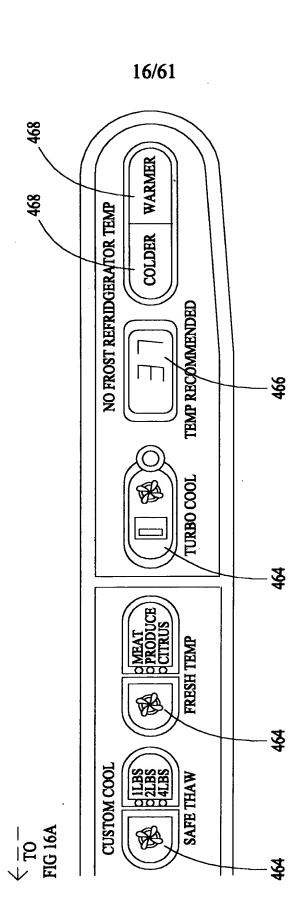


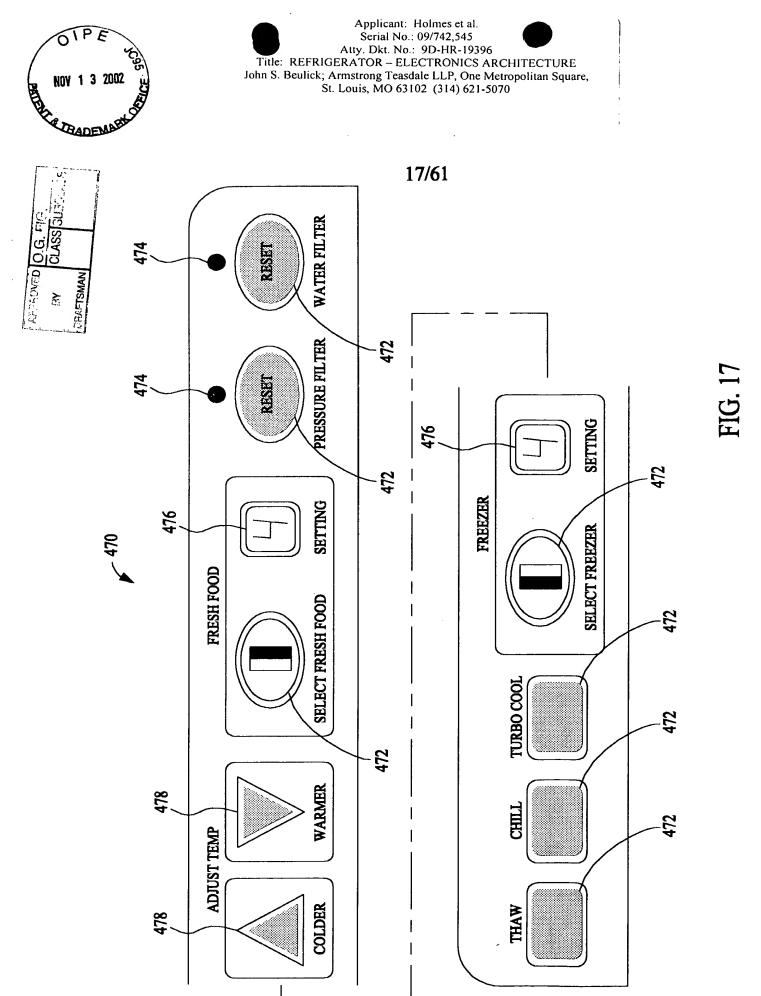


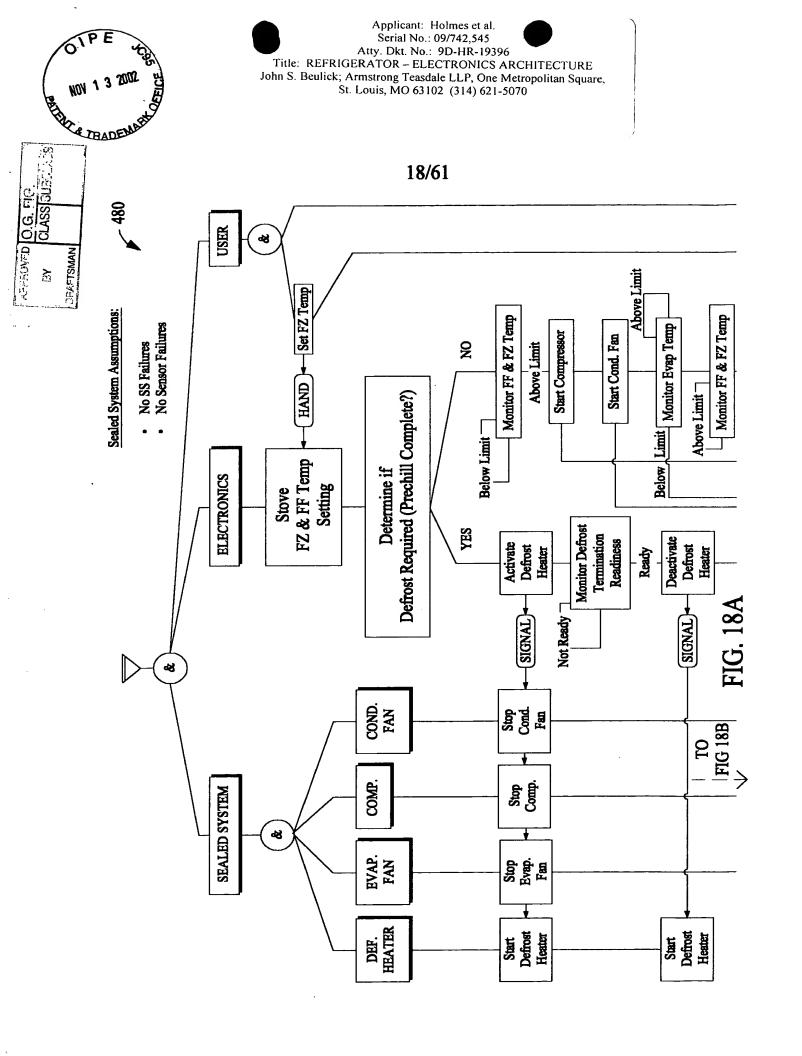


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HART & TRADE

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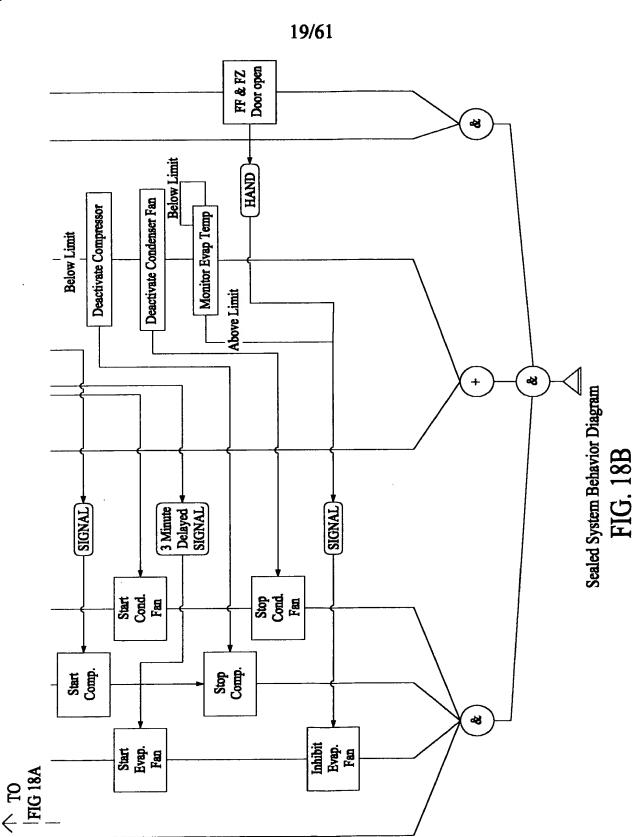
Atty. Dkt. No.: 9D-HR-19396

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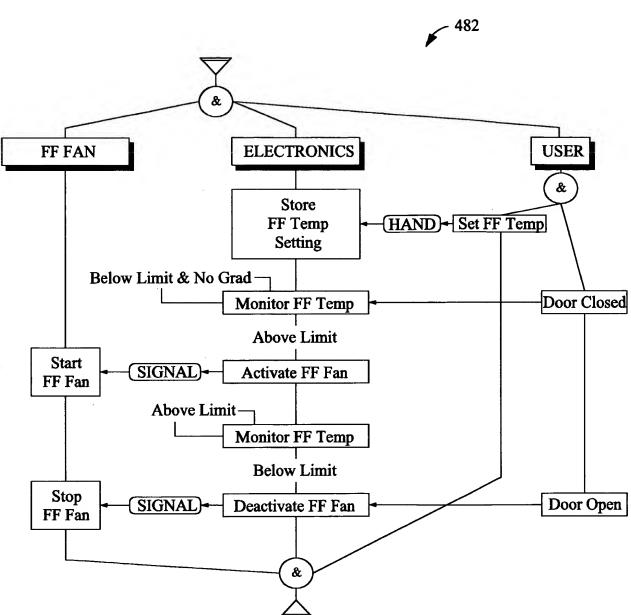
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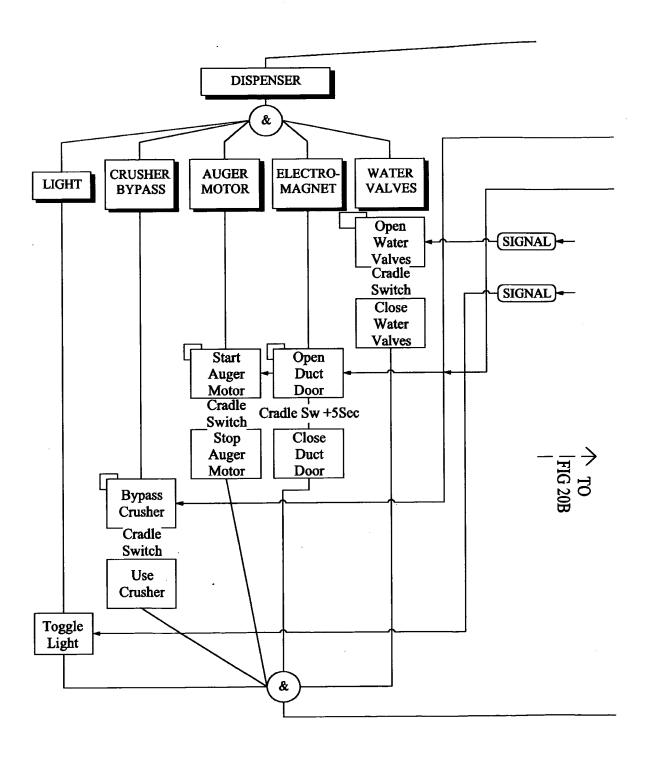


Fresh Food Fan Behavior Diagram

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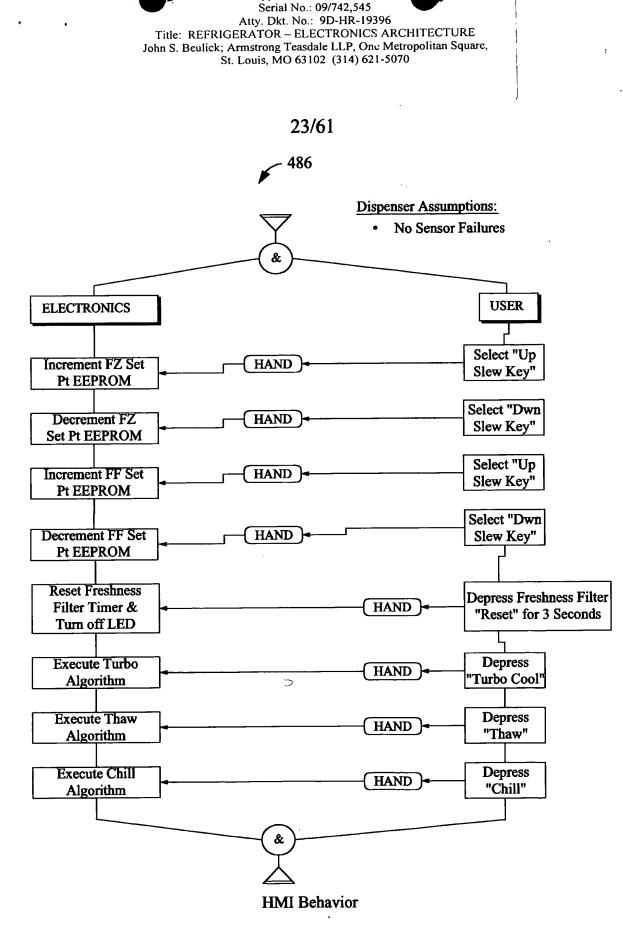




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St. Louis, MO 63102 (314) 621-5070 22/61 **484 Dispenser Assumptions:** No Sensor Failures **USER ELECTRONICS** Activate Cradle Select HAND HAND "CUBED" Switch Select Activate Cradle HAND HAND "CRUSHED" Switch Activate Cradle Select **Activate Water** HAND HAND "WATER" Switch Valves Activate **HAND** Toggle Light Light **Press Lock** Set Keypad HAND for 2 Sec Lockout Mode Reset Water Filter **Depress Water Filter** HAND Timer & Turn off "Reset" for 2 Seconds **LED**

FIG. 20B



Applicant: Holmes et al.

FIG. 21